Peter V. Resnic
Dearborn County Hospital
600 Wilson Creek Road
Lawrenceburg, IN 47025

Re: Registered Construction and Operation Status,
029-13820-00018

Dear Mr. Resnic:

The application from Dearborn County Hospital received on January 22, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following hospital located at 600 Wilson Creek Road, Lawrenceburg, Indiana, is still classified as registered:

(a) Two (2) natural gas/No. 2 fuel oil boilers rated at 11.25 MMBtu/hr each emitting through stack SV/O1.

(b) One (1) natural gas-fired air handler (01) rated at 0.49 MMBtu/hr vented to the atmosphere.

(c) One (1) natural gas-fired air handler (02) rated at 0.27MMBtu/hr vented to the atmosphere.

(d) One (1) 15,000 gallon fuel storage tank vented to the atmosphere.

(e) One (1) cooling tower operation at maximum rate of 108 gallons per hour vented to the atmosphere.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), as Dearborn County Hospital is in the township of Lawrenceburg, opacity limitations noted in 326 IAC 5-1-2(1) applies:

   (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

   (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

2. Pursuant to 326 IAC 6-2-4 (Emission Limitations for Indirect Heating Boilers), PM emissions from the boilers shall not exceed 0.48 pounds per MMBtu as noted in the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is conducted in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

3. Pursuant to 326 IAC 12 (40 CFR Part 60, Subpart Kb (Volatile Organic Storage Vessels)), the owner or operator shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

4. Pursuant to 326 IAC 12 (40 CFR Part 60, Subpart Dc (Boilers)), boiler EU-01 and EU-02 can use natural gas or number 2 fuel oil. During the periods that oil is combusted, no discharges to the atmosphere shall contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil that contains greater than 0.5 percent sulfur. The facility must also adhere to the specific testing and reporting requirements noted in section 60.44c, 60.46c, and 60.48c, which includes maintaining monthly records of the amount of fuel combusted and the sulfur content of the fuel. These records must be maintained for a period of two years.

This registration is a renewal issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/RB

cc: File - Dearborn County
Dearborn County Health Department
Air Compliance - Warren Greiling
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Dearborn County Hospital
Address:	600 Wilson Creek Road
City:	Lawrenceburg, Indiana, 47025
Authorized individual:	Peter V. Resnick
Phone #:	812-537-1010
Registration #:	029-13820-00018

I hereby certify that this hospital is still in operation and is in compliance with the requirements of Registration 029-13820-00018.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registered Source

Source Background and Description

Source Name:	Dearborn County Hospital
Source Location:	600 Wilson Creek Road, Lawrenceburg, Indiana 47025
County:	Dearborn
SIC Code:	8062
Operation Permit No.:	029-13820-00018
Permit Reviewer:	ERG/RB

The Office of Air Quality (OAQ) has reviewed an application from Dearborn County Hospital relating to the operation of heating and cooling equipment.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) natural gas/No. 2 fuel oil boilers rated at 11.25 MMBtu/hr each emitting through stack SV/O1.

(b) One (1) natural gas-fired air handler (01) rated at 0.49 MMBtu/hr vented to the atmosphere.

(c) One (1) natural gas-fired air handler (02) rated at 0.27MMBtu/hr vented to the atmosphere.

(d) One (1) 15,000 gallon fuel storage tank vented to the atmosphere.

(e) One (1) cooling tower operation at maximum rate of 108 gallons per hour vented to the atmosphere.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new units pending construction included in this permit.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration 029-2370-00018, issued February 11, 1992; and

(b) Exemption 037-00027-00018, issued February 12, 1991.

All conditions from previous approvals were incorporated into this permit except that the medical waste incinerator has been made inoperable and will be physically removed from the grounds in 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
SV/O1	Boiler	29	3	unknown	400EC

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 22, 2001, with additional information received on March 2, 2001.

Emission Calculations

See Appendix A for detailed emissions calculations (Appendix A, pages 1- 6.) Appendix B contains output from the US EPA's Tanks software (Appendix B, Pages 1-3).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	10.44
PM-10	10.44
SO_2	5.00
VOC	0.26
CO	3.59
NO_x	14.41
Single HAP	0.001
Total HAP	0.001

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) PM, PM_{10}, and NO_x are greater than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5.

(d) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(e) The source is not one of the 28 listed source categories.

County Attainment Status

The source is located in Dearborn County.

Pollutant	Status
PM-10	attainment
SO_2	unclassifiable
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dearborn County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Dearborn County has been classified as attainment or unclassifiable for all other criteria pollutant. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	10.44
PM10	10.44
SO_2	5.00
VOC	0.26
CO	3.59
NO_x	14.41

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) The source maintains their registration status.

(c) These emissions were based on data provided in the permit application.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 029-13820-00018, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

(a) The boilers are still subject to the new source performance standard, 326 IAC 12 (40 CFR 60, Subpart Dc - Standard of Performance for Small Industrial Commercial- Institutional Steam Generating Units), as the boilers have a Btu/hr rating larger than 10 million and were constructed after June 1989. Boiler EU-01 and EU-02 are rated at 11.25 MMBtu/hr (each) and were constructed in 1991. These boilers can use natural gas or number 2 fuel oil. During the periods that oil is combusted, no discharges to the atmosphere shall contain SO_2 in excess of 215 ng/J (0.50 lb/MMBtu) heat input; or as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil that contains greater than 0.5 percent sulfur. The facility must also adhere to the specific testing and reporting requirements noted in section 60.44c, 60.46c, and 60.48c, which includes maintaining monthly records of the amount of fuel combusted and the sulfur content of the fuel. These records must be maintained for a period of two years.

(b) 326 IAC 12 (40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Section 60.116b (Monitoring of Operations)) still applies for chemical storage tanks with a capacity greater than 40 cubic meters (m^3) that were constructed after July 1984; the Dearborn Hospital fuel storage tank has a capacity greater than 40 M^3 and was constructed in 1991. The owner or operator of any storage vessel with a capacity greater than or equal to 40 m^3 shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity the storage vessel.

(c) 326 IAC 20-4-1 (40 CFR 63 Subpart Q, National Emissions Standards for Hazardous Air Pollutants for Industrial Processing Cooling Towers) this rule applies to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994 and are either major sources or are integral parts of facilities that are major sources as defined in Section 63, 401. Dearborn Hospital has not used chromium-based water treatment chemicals and is not considered a major source as defined in Section 63.401. Therefore this rule does not apply.

(d) 326 IAC 12 (40 CFR Subpart Ce, Hospital/Medical/Infecting Waste Incinerators) The medical waste incinerator is not subject to this rule. It is no longer operational and was removed from the grounds in 2001.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit any criteria pollutant is less than one hundred (100) tons per year.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), as Dearborn County Hospital is in the township of Lawrenceburg, opacity limitation noted in 326 IAC 5-1-2(1) applies:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this petroleum products blending and storage facility will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

This source does not have potential VOC emissions equal to or greater than twenty five (25) tons per year, and is potentially subject to 8-4-3, therefore this source is not subject to the provisions of 326 IAC 8-1-6.

326 IAC 8-4-3 (Petroleum Liquid Storage Facility)

This applies to all petroleum liquid storage vessels with capacities greater than one-hundred fifty-thousand (150,000) liters, (39,000 gallons) containing volatile organic compounds whose true vapor pressure is greater than 10.5 kPa (1.52 psia). The fuel storage tank at Dearborn Hospital is only 15,000 gallons, therefore this tank is not subject to the provisions of 326 IAC 8-4-3.

326 IAC 6-2-4 (Emission Limitations for Facilities specified in 326 IAC 6-2-1(d))

(a) Particulate emissions from indirect heating facilities constructed after September 21, 1983 shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is conducted in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Two boilers, EU-01 and EU-02, used at Dearborn were constructed in 1991.

Boilers EU-01 and EU-02, have a maximum total source capacity of 22.5 MMBtu/hr, which yields a Pt value of 0.48 pounds of PM per MMBtu, providing a PM emissions rate of 10.9 pounds of PM per hour.

$$Pt = \frac{1.09}{22.5^{0.26}} = \frac{1.09}{2.25} = 0.48 \text{ pounds of PM per MMBtu}$$

Note, the maximum potential to emit PM emissions rate for both boilers is 0.32 pounds per hour.

The medical waste incinerator is not considered in 326 IAC 6-2-4 as it is no longer in operation.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This rule applies to stationary vessels used to store volatile organic liquids (VOL) that are located in specified counties, including Clark County, Floyd, Lake, or Porter Counties. Therefore, it does not apply to sources located in Dearborn County.

Conclusion

The operation of this hospital shall be subject to the conditions of the attached Registration 029-13820-00018.

Appendix A: Emissions Calculations - Summary

Company Name: **Dearborn County Hospital**
Address City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

	Pollutants Tons/Year					
Process	PM*	PM10*	SO2	NOx	VOC	CO
Combustion Natural Gas	0.04	0.04	0.00	0.33	0.02	0.07
Combustion Residual Oil	1.41	1.41	5.00	14.08	0.24	3.52
Cooling Tower	8.99	8.99	0.00	0.00	0.00	0.00
Fuel Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Total	**10.44**	**10.44**	**5.00**	**14.41**	**0.26**	**3.59**

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Dearborn County Hospital**
Address City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.8	6.7

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	12.0	12.0	0.6	100.0 **see below	5.3	21.0
Potential Emission in tons/yr	0.04	0.04	0.00	0.33	0.02	0.07

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Dearborn County Hospital**
Address City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	6.990E-06	3.995E-06	2.497E-04	5.992E-03	1.132E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.664E-06	3.662E-06	4.660E-06	1.265E-06	6.990E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

Company Name: **Dearborn County Hospital**
Address, City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur
		0.05
22.5	1407.85714	

	Pollutant				
	PM*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	7.1 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	1.4	5.0	14.1	0.2	3.5

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)
*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emission calculations.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

Company Name: **Dearborn County Hospital**
Address, City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

HAPs - Metals

	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

HAPs - Metals (continued)

	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Methodology

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Cooling Tower

Company Name: **Dearborn County Hospital**
Address City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

Cooling Water Flow Rate	108,000	Gallons/hr
PM 10 Emission Factor (AP-42 section13)	0.019	Lbs/1000 Gallons
PM Emissions	2.05	Lbs/hr
	8.99	Tons/year

Appendix A: Emissions Calculations
VOC
From Fuel Storage Tanks.

Company Name: **Dearborn County Hospital**
Address City IN Zip: **600 Wilson Creek Road, Lawrenceburg, Indiana 47025**
CP: **029-13820**
Plt ID: **029-00018**
Reviewer: ERG/RB
Date: January 31, 2001

Results from U.S. EPA TANKS software run
See Appendices B for details

	VOC	
Working Loss	0.29	Lbs/ year
Breathing Loss	5.65	Lbs/year
Total Emissions	5.94	Lbs/year
	0.00297	Tons/year

TANKS 4.0
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	01
City:	Lawerenceburg
State:	Indiana
Company:	Dearborne Hospital
Type of Tank:	Horizontal Tank
Description:	

Tank Dimensions

Shell Length (ft):	29.25
Diameter (ft):	10.50
Volume (gallons):	15,000.00
Turnovers:	1.00
Net Throughput (gal/yr):	15,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition:	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig):	0.00

Meteorological Data used in Emissions Calculations: Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	59.05	50.59	67.51	54.50	0.0063	0.0047	0.0083	130.0000			188.00	Option 5: A=12.101, B=8907

TANKS 4.0
Emissions Report - Summary Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.29	5.65	5.94

TANKS 4.0
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	01
City:	Lawerenceburg
State:	Indiana
Company:	Dearborne Hospital
Type of Tank:	Horizontal Tank
Description:	

Tank Dimensions

Shell Length (ft):	29.25
Diameter (ft):	10.50
Volume (gallons):	15,000.00
Turnovers:	1.00
Net Throughput (gal/yr):	15,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition:	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig):	0.00

Meteorological Data used in Emissions Calculations: Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	59.05	50.59	67.51	54.50	0.0063	0.0047	0.0083	130.0000			188.00	Option 5: A=12.101, B=8907

TANKS 4.0
Emissions Report - Summary Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.29	5.65	5.94

TANKS 4.0
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	01
City:	Lawerenceburg
State:	Indiana
Company:	Dearborne Hospital
Type of Tank:	Horizontal Tank
Description:	

Tank Dimensions

Shell Length (ft):	29.25
Diameter (ft):	10.50
Volume (gallons):	15,000.00
Turnovers:	1.00
Net Throughput (gal/yr):	15,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition:	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig):	0.00

Meteorological Data used in Emissions Calculations: Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	59.05	50.59	67.51	54.50	0.0063	0.0047	0.0083	130.0000			188.00	Option 5: A=12.101, B=8907

TANKS 4.0
Emissions Report - Summary Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.29	5.65	5.94